FIG. 1A-1

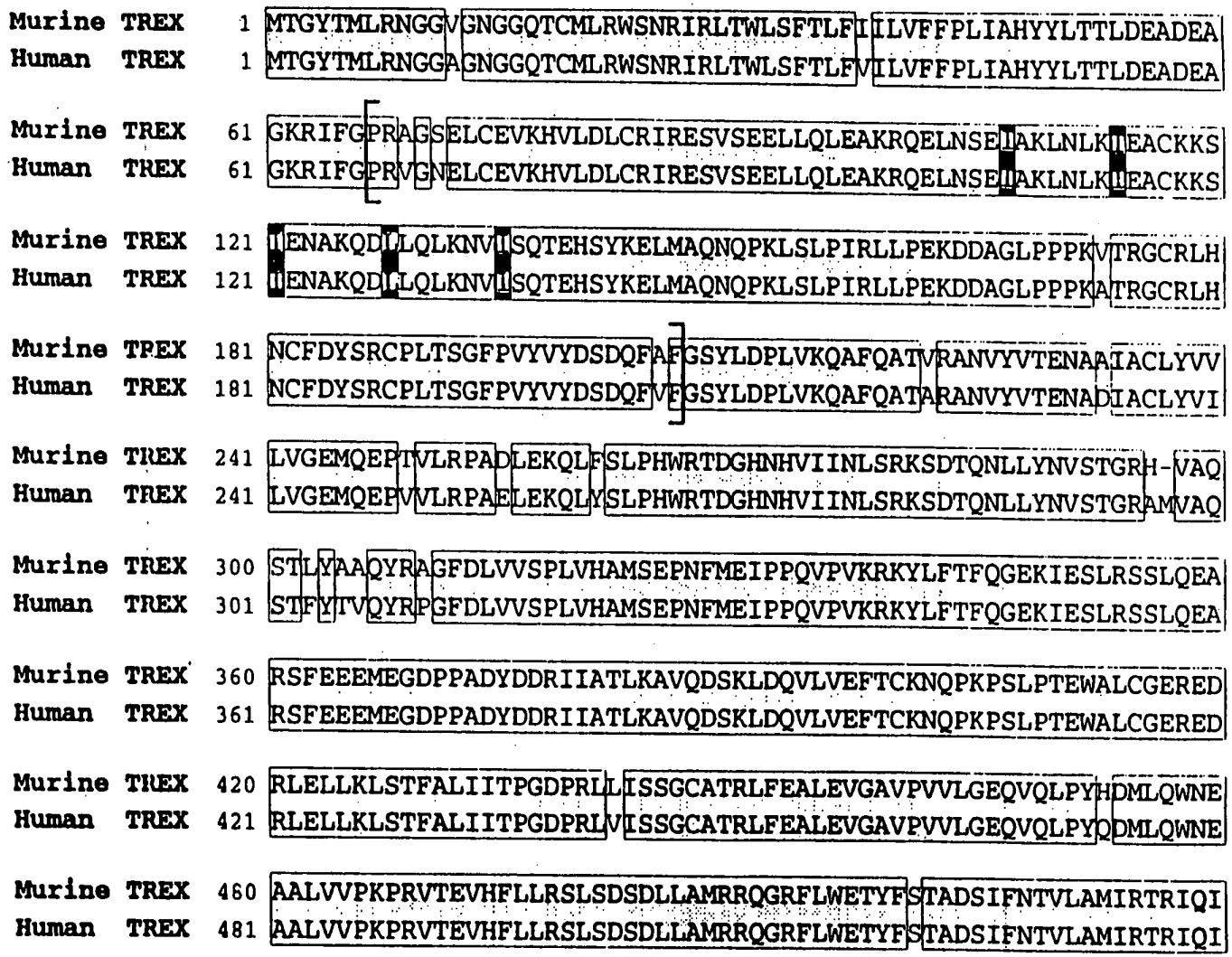


FIG. 1A-2

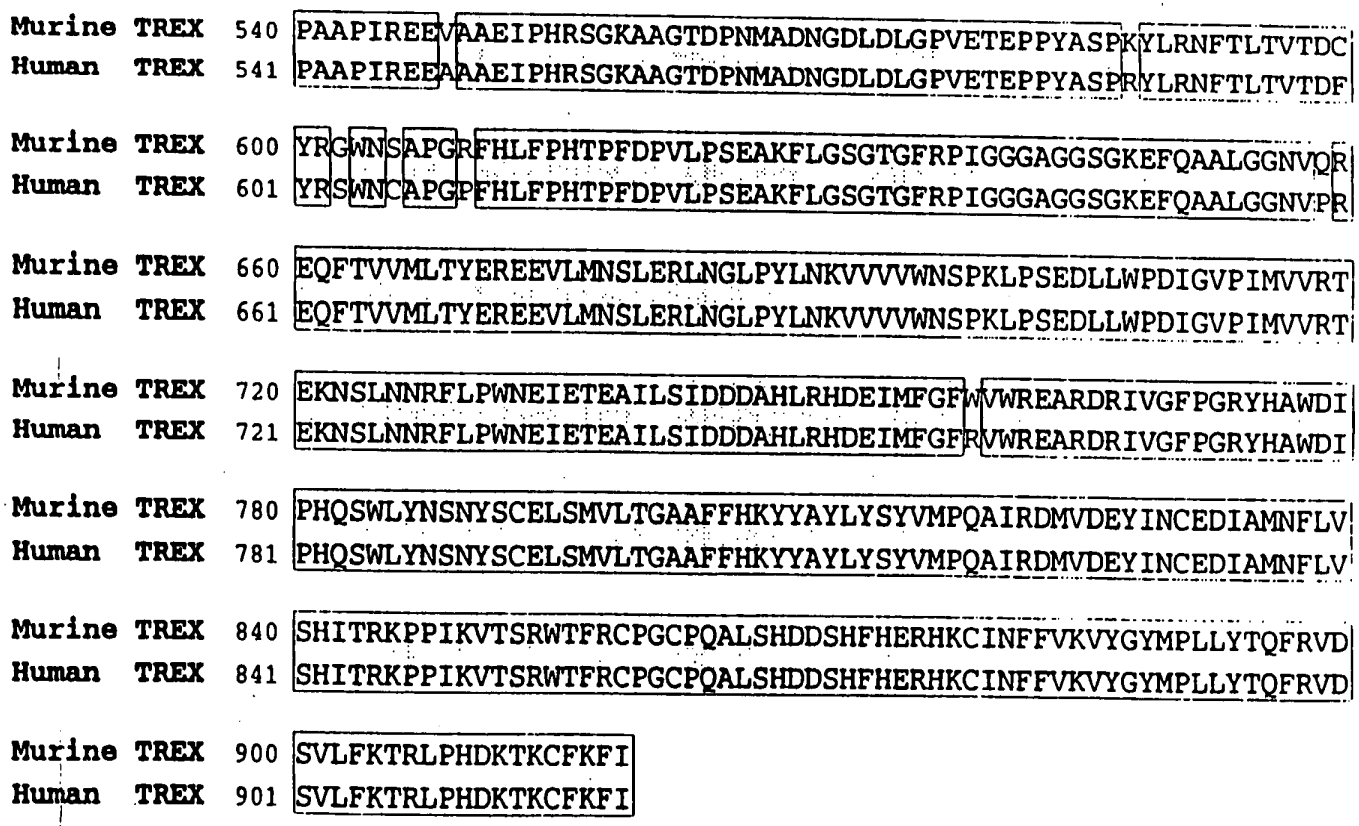


FIG. 1B

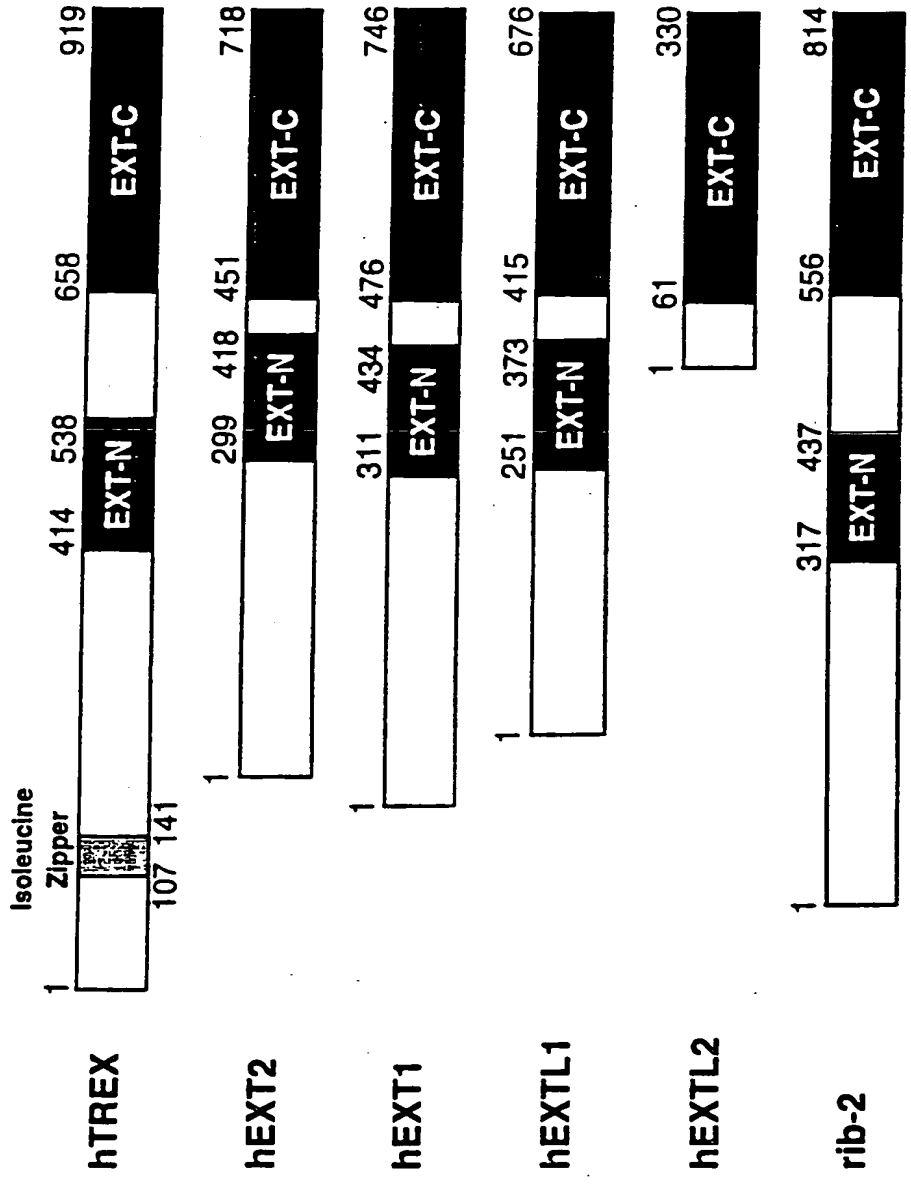


FIG. 1C

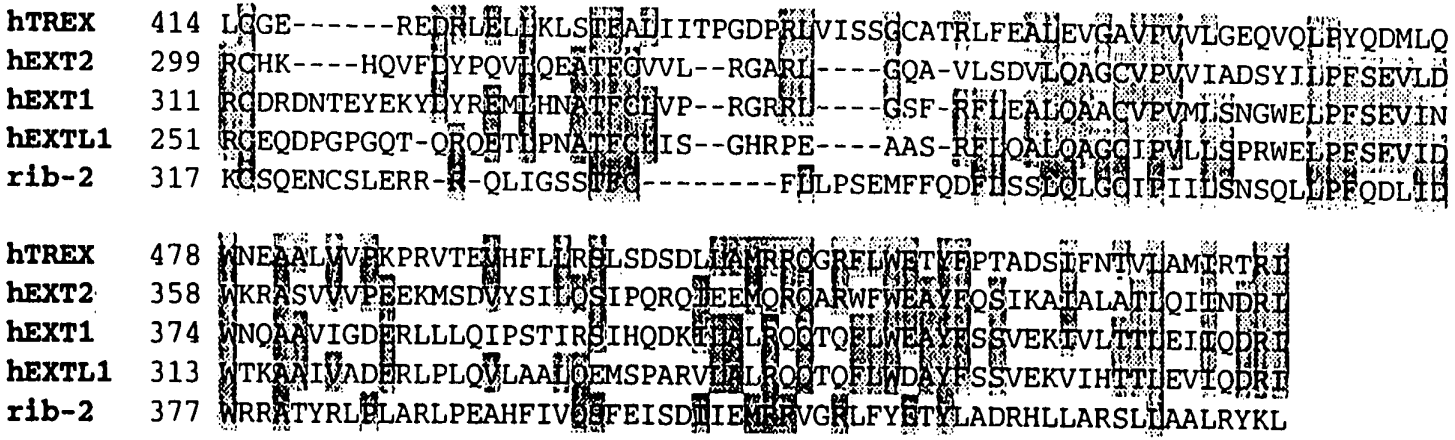


FIG. 1D

FIG. 1E-1

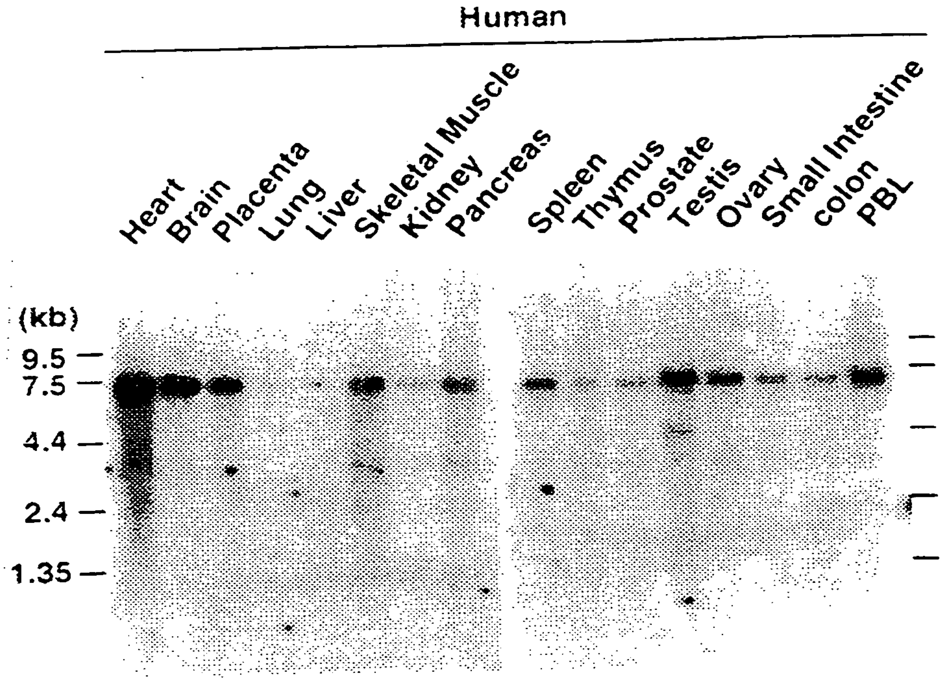


FIG. 1E-2

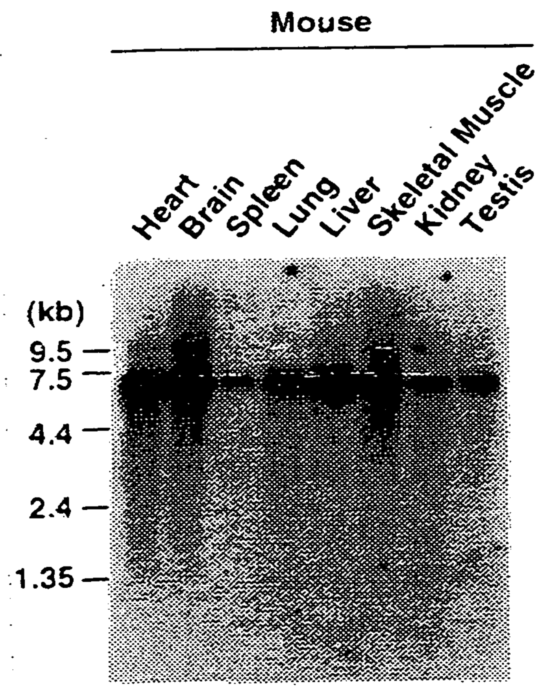


FIG. 1F

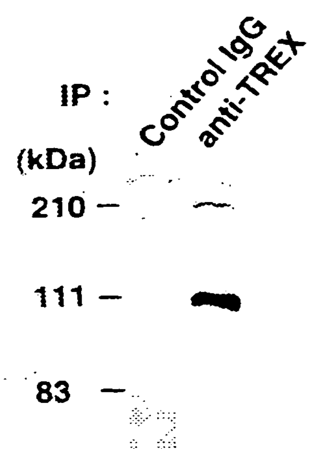


FIG. 2A *in vivo* binding

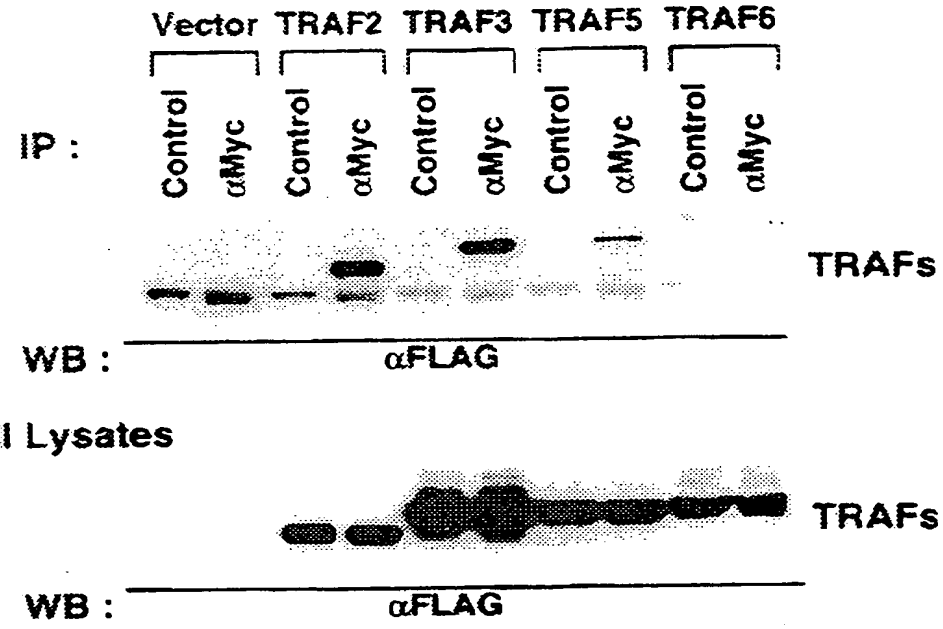


FIG. 2B

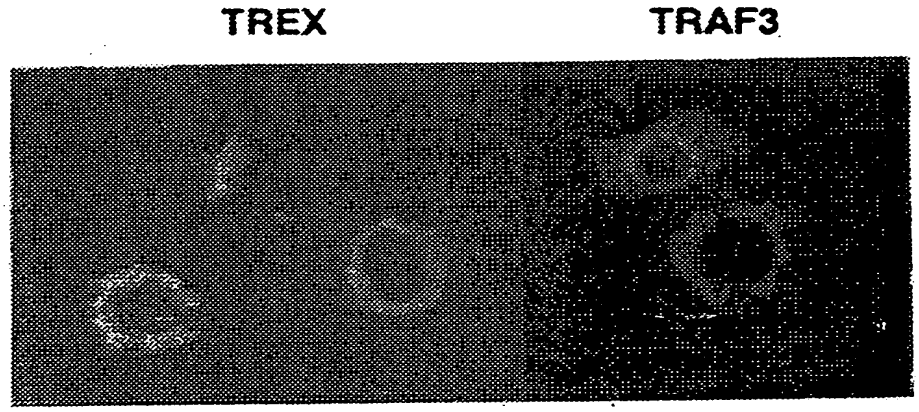


FIG. 3

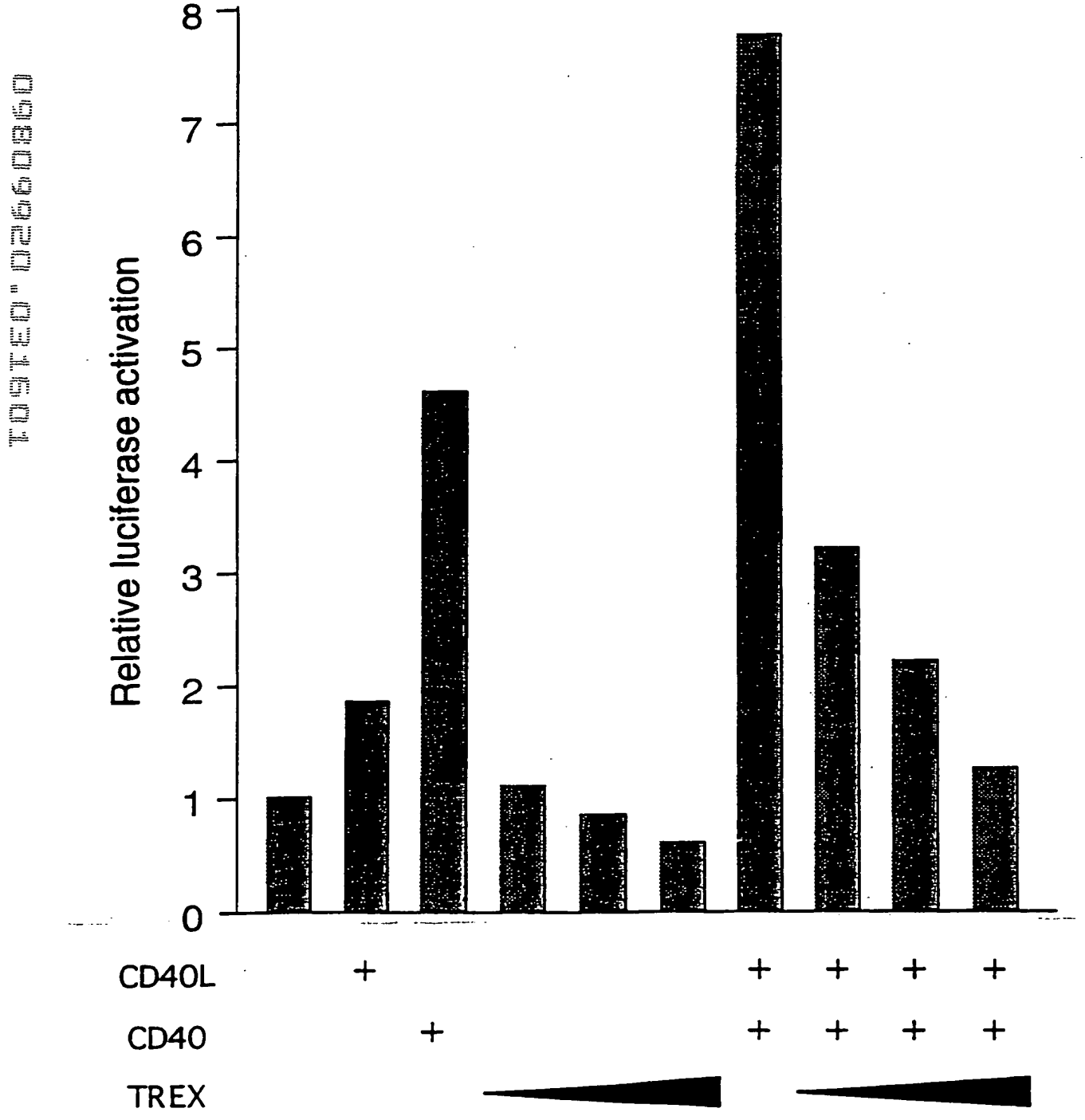
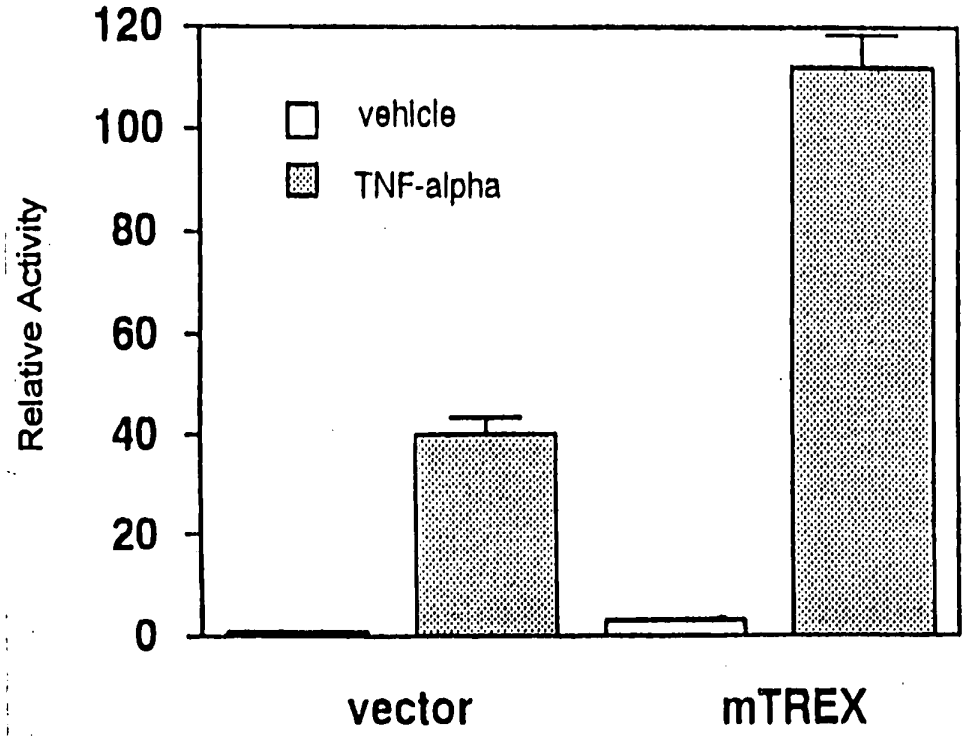


FIG. 4

Effect of mTREX on TNF-alpha-induced NF-kappaB activation in HEK 293 cells



n=3

980707

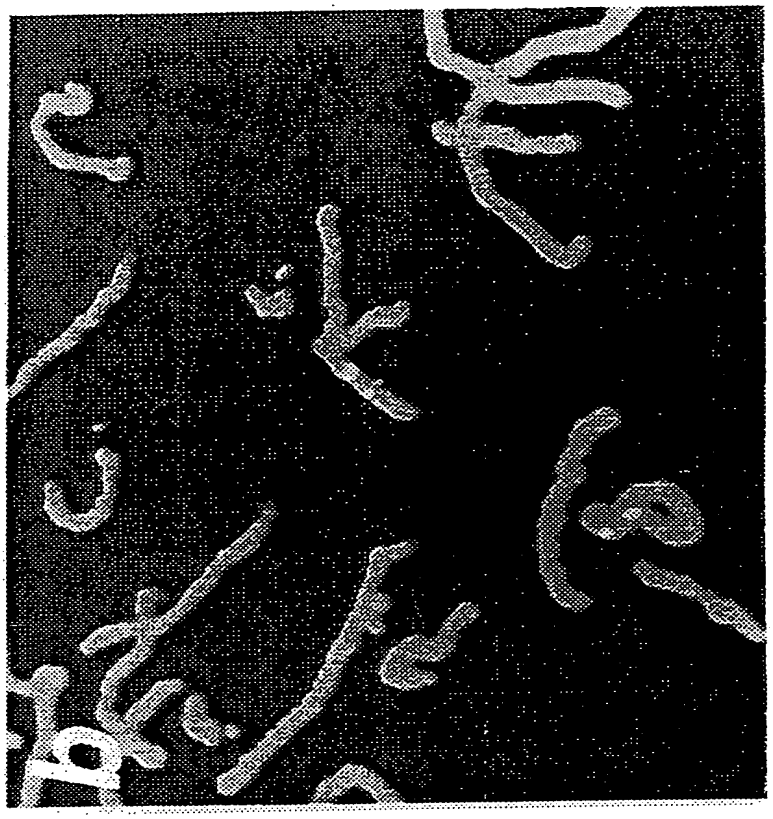


FIG. 5B

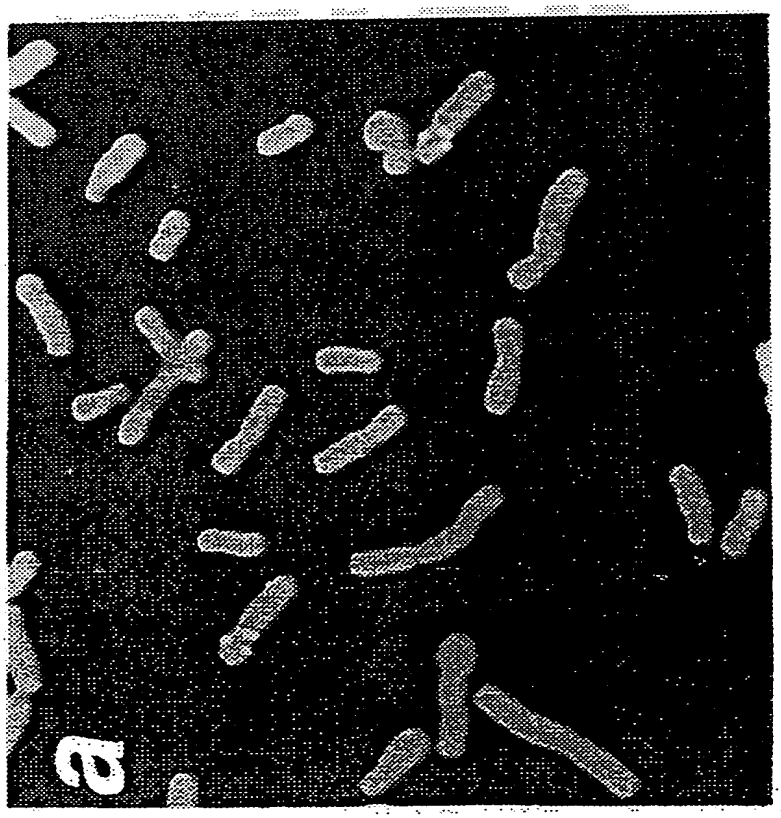


FIG. 5A

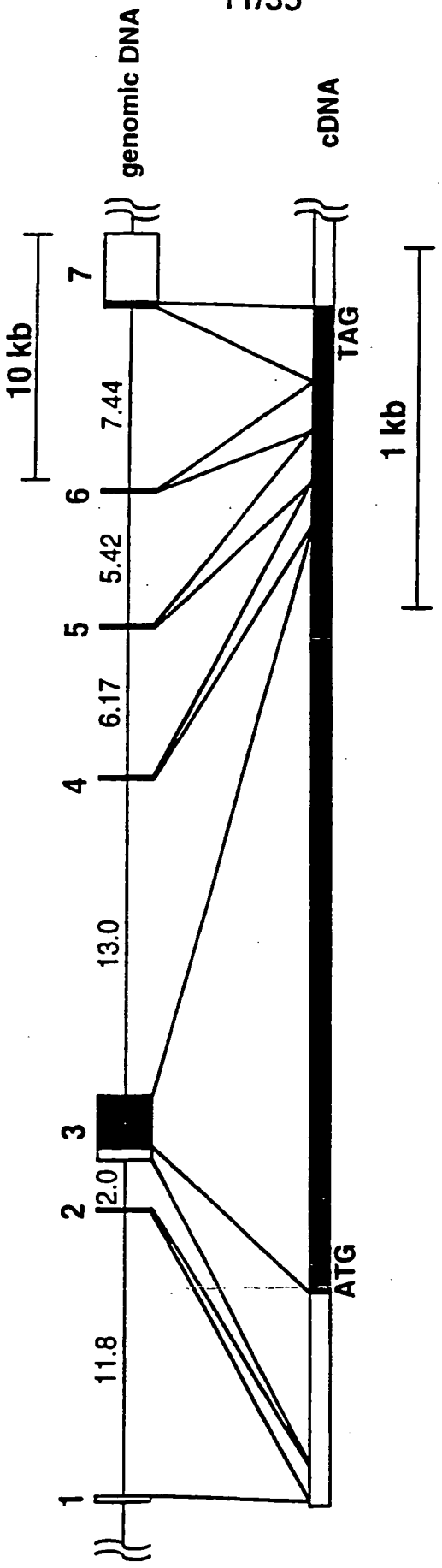


FIG. 6

FIG. 7A-1

cctgatcgtt ggtagtggca tggaggacgg ggctggcatt tcagactgcc agctgttttt
accagccgct gcatcacttg aatagaagct atgcatattg gctggccgac aaagccaagg
gacaaaagct atggccgtta aaatggtccc tctgagtcca gggctctttc cctggctttt
agcaccatgg atctcttcct tttcatccca tcagcaatgt ggtaccttct tctacttgat
gatgacagct gatacttcag atttgcctga ctaaggttag aaacctgaat cgctgtgagg
aagatgaaat ttccatttta cttggtgcct tgtgcaggga gcacactgat ccttccagaa
acttgtgtgt gaaaagaggt tgcgttttgt cagacagact catggttatg gcgagcgatc
cgacgtgatc agagtgggca agaggcacag cgaactcatg acaggctata ccatgttgcg
gaatgggggа gtggggaacg gtggtcagac ctgtatgctg cgctggtcca atcgcatccg
gctgacatgg ctgagtttca cgctgttcat catcctcgtc ttcttccccc tcattgctca
ctattacctc accactctgg acgaggcaga cgaggctggc aagcgcatct tcggccctcg
ggctggcagt gagctctgtg aggtaaagca tgtccttgat ctctgtcgga ttcgtgagtc
tgtgagcgaa gagcttctac agctcgaagc caagcggcag gagctgaaca gcgagattgc
caagctgaac ctcaagattg aagcctgtaa gaagagcata gagaatgcca agcaggacct
gctgcagctc aagaatgtca ttagccagac agagcactcc tacaaggagc tgatggccca
gaaccagccc aaactgtccc tgcccatccg actgctccct gagaaggacg atgccggcct
tccacccccc aaggtcactc ggggttgccg ccttcacaac tgctttgatt actctcgttg
tcctctgacg tctggctttc ccgtctacgt ctatgacagt gaccagtttg cctttgggag
ctacctggac cctttggtca agcaggcttt tcaggctaca gtgagagcca acgtttatgt
tacagaaaat gcggccatcg cctgcctgta tgtggtgtta gtgggagaaa tgcaagagcc
cactgtgctg cggcctgccg accttgaaaa gcagctgttt tctctgccac actggaggac
agatgggcac aaccacgtca ttatcaacct gtcccggaag tcagacacac agaatctact
gtacaacgtc agtacaggcc gccatgtggc ccagtccacc ctctatgctg cccagtacag
agctggcttt gacctggtcg tgtcacccct tgtccatgct atgtctgaac ccaacttcat
ggaaatccca ccgcaggtgc cagttaagcg gaaatatctc ttcactttcc agggcgagaa
gatcgagtct ctgagatcta gccttcagga ggcccgttcc ttcgaggaag agatggaggg
cgaccctccg gccgactatg acgatcgcat cattgccacc ctaaaggctg tacaggacag

APPROVED BY DRAFTSMAN	O.G. FIG.	
	CLASS	SUBCLASS

FIG. 7A-2

```
caagctggat caggtgctgg tagaattcac ttgcaaaaac cagccgaagc ctagcctgcc
gactgagtgg gcactgtgtg gggagcggga agaccgcctg gagttactga agctctccac
cttcgccctc atcatcactc ccggggaccc gcgcctgctc atttcatctg ggtgtgccac
gcggctcttc gaggccctgg aggtgggggc cgtgccggtg gtgctcgggg agcaggtgca
gctcccgtac cacgacatgc tgcagtggaa cgaggccgcc ctggtggtgc ccaagcctcg
cgtcacagag gtccacttcc tgttacgaag tctttcagac agtgatctgt tggccatgag
gcggcaaggc cgctttctct gggagaccta cttctccacc gcagacagta tttttaatac
cgtgctggcc atgattagga ctcgaattca gatcccagct gctcccatcc gggaagaggt
agcggctgag atcccccatc gttcaggcaa agcagctgga actgacccca acatggctga
caatggggac ctggacctgg ggccggtaga gacagaacca ccctatgcct cacctaaata
cctccgcaat ttcactctga ctgtcacaga ctgttaccgt ggctggaact ctgccccggg
acggttccat ctttttcccc acacaccctt tgatcctgtg ttgccctctg aggccaaatt
cttgggctca gggactggat ttcggccgat cggtggcggg gctgggggct ctggcaagga
gttccaggca gcgctcggag gcaatgtcca gcgggagcag ttcacagttg tgatgctgac
ctacgagcgg gaggaagtgc tcatgaactc cctggagaga ctcaacggcc tcccctacct
gaacaaggta gtggtggtgt ggaactctcc caagctgccc tcggaggacc ttttgtggcc
agacattggt gtccccatca tggtcgtccg tactgagaag aacagtttga acaatcggtt
cttgccctgg aatgagattg agacagaggc catactgtcc atcgacgatg atgctcacct
ccgccatgat gaaatcatgt ttgggttttg ggtgtggaga gaagcacgtg atcgcattgt
gggtttccct ggccggtacc atgcgtggga catcccgcac cagtcctggc tctacaattc
caactactcc tgtgagctgt ccatggtgct gacgggcgct gccttctttc acaagtatta
tgcctacctg tattcttatg tgatgcccca ggccatccgg gacatggtgg acgagtacat
caactgtgag gatatcgcca tgaacttcct tgtctcccac atcacacgga aaccccccat
caaggtgaca tcaaggtgga cttttcgatg cccagggtgc cctcaggccc tgtcccatga
tgactctcat tttcacgagc ggcacaagtg tatcaacttt tttgtcaagg tgtacggcta
tatgcctctc ttgtacacac agttcagggt ggactccgtg ctcttcaaga cccgcctgcc
ccatgacaag accaagtgct tcaagttcat ctagggcctt gcagttctga ggagacaatg
agcagagcga gggggagtca ccctcaaggt tcccaaggtg tcgaaggtcc ttggggacat
ctgtcgggca gggccaagac cctttgctgg gagaggcagc aggaagagtg gaaagggata
gctgtctttc attttgaagt cagccacact gggcctggga tcctggtcag agactcaggn
cgtctgcaca gggcactgac tgatagcgaa cactgaggac tgttcataag cccaggaca
```

FIG. 7B-1

```
        10         20         30         40         50         60
cctgatcgttggtagtggcatggaggacggggctggcatttcagactgccagctgttttt

        70         80         90        100        110        120
accagccgctgcatcacttgaatagaagctatgcatattggctggccgacaaagccaagg

       130        140        150        160        170        180
gacaaaagctatggccgttaaaatggtccctctgagtccagggctctttccctggctttt

       190        200        210        220        230        240
agcaccatggatctcttccttttcatcccatcagcaatgtggtaccttcttctacttgat

       250        260        270        280        290        300
gatgacagctgatacttcagatttgcctgactaaggttagaaacctgaatcgctgtgagg

       310        320        330        340        350        360
aagatgaaatttccattttacttggtgccttgtgcagggagcacactgatccttccagaa

       370        380        390        400        410        420
acttgtgtgtgaaaagaggttgcgttttgtcagacagactcatggttatggcgagcgatc

       430        440        450        460        470        480
cgacgtgatcagagtgggcaagaggcacagcgaactcatgacaggctataccatgttgcg
                                      M  T  G  Y  T  M  L  R

       490        500        510        520        530        540
gaatgggggagtggggaacggtggtcagacctgtatgctgcgctggtccaatcgcatccg
 N  G  G  V  G  N  G  G  Q  T  C  M  L  R  W  S  N  R  I  R

       550        560        570        580        590        600
gctgacatggctgagtttcacgctgttcatcatcctcgtcttcttcccctcattgctca
 L  T  W  L  S  F  T  L  F  I  I  L  V  F  F  P  L  I  A  H

       610        620        630        640        650        660
ctattacctcaccactctggacgaggcagacgaggctggcaagcgcatcttcggccctcg
 Y  Y  L  T  T  L  D  E  A  D  E  A  G  K  R  I  F  G  P  R

       670        680        690        700        710        720
ggctggcagtgagctctgtgaggtaaagcatgtccttgatctctgtcggattcgtgagtc
 A  G  S  E  L  C  E  V  K  H  V  L  D  L  C  R  I  R  E  S
```

FIG. 7B-2

```
        730       740       750       760       770       780
tgtgagcgaagagcttctacagctcgaagccaagcggcaggagctgaacagcgagattgc
 V  S  E  E  L  L  Q  L  E  A  K  R  Q  E  L  N  S  E  I  A

        790       800       810       820       830       840
caagctgaacctcaagattgaagcctgtaagaagagcatagagaatgccaagcaggacct
 K  L  N  L  K  I  E  A  C  K  K  S  I  E  N  A  K  Q  D  L

        850       860       870       880       890       900
gctgcagctcaagaatgtcattagccagacagagcactcctacaaggagctgatggccca
 L  Q  L  K  N  V  I  S  Q  T  E  H  S  Y  K  E  L  M  A  Q

        910       920       930       940       950       960
gaaccagcccaaactgtccctgcccatccgactgctccctgagaaggacgatgccggcct
 N  Q  P  K  L  S  L  P  I  R  L  L  P  E  K  D  D  A  G  L

        970       980       990      1000      1010      1020
tccaccccccaaggtcactcggggttgccgccttcacaactgctttgattactctcgttg
 P  P  P  K  V  T  R  G  C  R  L  H  N  C  F  D  Y  S  R  C

       1030      1040      1050      1060      1070      1080
tcctctgacgtctggctttcccgtctacgtctatgacagtgaccagtttgcctttgggag
 P  L  T  S  G  F  P  V  Y  V  Y  D  S  D  Q  F  A  F  G  S

       1090      1100      1110      1120      1130      1140
ctacctggaccctttggtcaagcaggcttttcaggctacagtgagagccaacgtttatgt
 Y  L  D  P  L  V  K  Q  A  F  Q  A  T  V  R  A  N  V  Y  V

       1150      1160      1170      1180      1190      1200
tacagaaaatgcggccatcgcctgcctgtatgtggtgttagtgggagaaatgcaagagcc
 T  E  N  A  A  I  A  C  L  Y  V  V  L  V  G  E  M  Q  E  P

       1210      1220      1230      1240      1250      1260
cactgtgctgcggcctgccgaccttgaaaagcagctgttttctctgccacactggaggac
 T  V  L  R  P  A  D  L  E  K  Q  L  F  S  L  P  H  W  R  T

       1270      1280      1290      1300      1310      1320
agatgggcacaaccacgtcattatcaacctgtcccggaagtcagacacacagaatctact
 D  G  H  N  H  V  I  I  N  L  S  R  K  S  D  T  Q  N  L  L

       1330      1340      1350      1360      1370      1380
gtacaacgtcagtacaggccgccatgtggcccagtccaccctctatgctgcccagtacag
 Y  N  V  S  T  G  R  H  V  A  Q  S  T  L  Y  A  A  Q  Y  R

       1390      1400      1410      1420      1430      1440
agctggctttgacctggtcgtgtcaccccttgtccatgctatgtctgaacccaacttcat
 A  G  F  D  L  V  V  S  P  L  V  H  A  M  S  E  P  N  F  M

       1450      1460      1470      1480      1490      1500
ggaaatcccaccgcaggtgccagttaagcggaaatatctcttcactttccagggcgagaa
 E  I  P  P  Q  V  P  V  K  R  K  Y  L  F  T  F  Q  G  E  K
```

FIG. 7B-3

```
        1510      1520      1530      1540      1550      1560
gatcgagtctctgagatctagccttcaggaggcccgttccttcgaggaagagatggaggg
 I  E  S  L  R  S  S  L  Q  E  A  R  S  F  E  E  E  M  E  G

        1570      1580      1590      1600      1610      1620
cgaccctccggccgactatgacgatcgcatcattgccaccctaaaggctgtacaggacag
 D  P  P  A  D  Y  D  D  R  I  I  A  T  L  K  A  V  Q  D  S

        1630      1640      1650      1660      1670      1680
caagctggatcaggtgctggtagaattcacttgcaaaaaccagccgaagcctagcctgcc
 K  L  D  Q  V  L  V  E  F  T  C  K  N  Q  P  K  P  S  L  P

        1690      1700      1710      1720      1730      1740
gactgagtgggcactgtgtggggagcgggaagaccgcctggagttactgaagctctccac
 T  E  W  A  L  C  G  E  R  E  D  R  L  E  L  L  K  L  S  T

        1750      1760      1770      1780      1790      1800
cttcgccctcatcatcactcccggggacccgcgcctgctcatttcatctgggtgtgccac
 F  A  L  I  I  T  P  G  D  P  R  L  L  I  S  S  G  C  A  T

        1810      1820      1830      1840      1850      1860
gcggctcttcgaggccctggaggtgggggccgtgccggtggtgctcggggagcaggtgca
 R  L  F  E  A  L  E  V  G  A  V  P  V  V  L  G  E  Q  V  Q

        1870      1880      1890      1900      1910      1920
gctcccgtaccacgacatgctgcagtggaacgaggccgccctggtggtgcccaagcctcg
 L  P  Y  H  D  M  L  Q  W  N  E  A  A  L  V  V  P  K  P  R

        1930      1940      1950      1960      1970      1980
cgtcacagaggtccacttcctgttacgaagtctttcagacagtgatctgttggccatgag
 V  T  E  V  H  F  L  L  R  S  L  S  D  S  D  L  L  A  M  R

        1990      2000      2010      2020      2030      2040
gcggcaaggccgctttctctgggagacctacttctccaccgcagacagtatttttaatac
 R  Q  G  R  F  L  W  E  T  Y  F  S  T  A  D  S  I  F  N  T

        2050      2060      2070      2080      2090      2100
cgtgctggccatgattaggactcgaattcagatcccagctgctcccatccgggaagaggt
 V  L  A  M  I  R  T  R  I  Q  I  P  A  A  P  I  R  E  E  V

        2110      2120      2130      2140      2150      2160
agcggctgagatcccccatcgttcaggcaaagcagctggaactgaccccaacatggctga
 A  A  E  I  P  H  R  S  G  K  A  A  G  T  D  P  N  M  A  D

        2170      2180      2190      2200      2210      2220
caatggggacctggacctggggccggtagagacagaaccaccctatgcctcacctaaata
 N  G  D  L  D  L  G  P  V  E  T  E  P  P  Y  A  S  P  K  Y

        2230      2240      2250      2260      2270      2280
cctccgcaatttcactctgactgtcacagactgttaccgtggctggaactctgccccggg
 L  R  N  F  T  L  T  V  T  D  C  Y  R  G  W  N  S  A  P  G
```

FIG. 7B-4

```
      2290       2300       2310       2320       2330       2340
acggttccatctttttccccacacacccttttgatcctgtgttgccctctgaggccaaattt
 R  F  H  L  F  P  H  T  P  F  D  P  V  L  P  S  E  A  K  F

      2350       2360       2370       2380       2390       2400
cttgggctcagggactggatttcggccgatcggtggcggggctgggggctctggcaaggaa
 L  G  S  G  T  G  F  R  P  I  G  G  G  A  G  G  S  G  K  E

      2410       2420       2430       2440       2450       2460
gttccaggcagcgctcggaggcaatgtccagcgggagcagttcacagttgtgatgctgacc
 F  Q  A  A  L  G  G  N  V  Q  R  E  Q  F  T  V  V  M  L  T

      2470       2480       2490       2500       2510       2520
ctacgagcgggaggaagtgctcatgaactccctggagagactcaacggcctcccctacctt
 Y  E  R  E  E  V  L  M  N  S  L  E  R  L  N  G  L  P  Y  L

      2530       2540       2550       2560       2570       2580
gaacaaggtagtggtggtgtggaactctcccaagctgccctcggaggacctttgtggccc
 N  K  V  V  V  V  W  N  S  P  K  L  P  S  E  D  L  L  W  P

      2590       2600       2610       2620       2630       2640
agacattggtgtccccatcatggtcgtccgtactgagaagaacagtttgaacaatcggtt
 D  I  G  V  P  I  M  V  V  R  T  E  K  N  S  L  N  N  R  F

      2650       2660       2670       2680       2690       2700
cttgccctggaatgagattgagacagaggccatactgtccatcgacgatgatgctcacct
 L  P  W  N  E  I  E  T  E  A  I  L  S  I  D  D  D  A  H  L

      2710       2720       2730       2740       2750       2760
ccgccatgatgaaatcatgtttgggttttgggtgtggagagaagcacgtgatcgcattgt
 R  H  D  E  I  M  F  G  F  W  V  W  R  E  A  R  D  R  I  V

      2770       2780       2790       2800       2810       2820
gggtttccctggccggtaccatgcgtgggacatcccgcaccagtcctggctctacaattc
 G  F  P  G  R  Y  H  A  W  D  I  P  H  Q  S  W  L  Y  N  S

      2830       2840       2850       2860       2870       2880
caactactcctgtgagctgtccatggtgctgacgggcgctgccttctttcacaagtatta
 N  Y  S  C  E  L  S  M  V  L  T  G  A  A  F  F  H  K  Y  Y

      2890       2900       2910       2920       2930       2940
tgcctacctgtattcttatgtgatgccccaggccatccgggacatggtggacgagtacat
 A  Y  L  Y  S  Y  V  M  P  Q  A  I  R  D  M  V  D  E  Y  I

      2950       2960       2970       2980       2990       3000
caactgtgaggatatcgccatgaacttccttgtctcccacatcacacggaaaccccccat
 N  C  E  D  I  A  M  N  F  L  V  S  H  I  T  R  K  P  P  I

      3010       3020       3030       3040       3050       3060
caaggtgacatcaaggtggacttttcgatgcccagggtgccctcaggccctgtcccatga
 K  V  T  S  R  W  T  F  R  C  P  G  C  P  Q  A  L  S  H  D
```

FIG. 7B-5

```
      3070       3080       3090       3100       3110       3120
tgactctcattttcacgagcggcacaagtgtatcaacttttttgtcaaggtgtacggcta
 D  S  H  F  H  E  R  H  K  C  I  N  F  F  V  K  V  Y  G  Y

      3130       3140       3150       3160       3170       3180
tatgcctctcttgtacacacagttcagggtggactccgtgctcttcaagacccgcctgcc
 M  P  L  L  Y  T  Q  F  R  V  D  S  V  L  F  K  T  R  L  P

      3190       3200       3210       3220       3230       3240
ccatgacaagaccaagtgcttcaagttcatctagggccttgcagttctgaggagacaatg
 H  D  K  T  K  C  F  K  F  I  *

      3250       3260       3270       3280       3290       3300
agcagagcgaggggagtcaccctcaaggttcccaaggtgtcgaaggtccttggggacat

      3310       3320       3330       3340       3350       3360
ctgtcgggcagggccaagacccttgctgggagaggcagcaggaagagtggaaagggata

      3370       3380       3390       3400       3410       3420
gctgtctttcattttgaagtcagccacactgggcctgggatcctggtcagagactcaggn

      3430       3440       3450       3460       3470
cgtctgcacagggcactgactgatagcgaacactgaggactgttcataagcccaggaca
```

FIG. 8A-1

ggcgggtccc tgagctggaa gccggagagc aagccctgga ggttcactct ttcaagaagt
cgtgtgctga ggtgtaatgc tacacaagtc agaggaagga agggtcctga aacacatggc
ctgattgttg gcaaaggcat cataagaagc tggcatttat ttctgttcta acctattact
gtataactgt gaatagacac tatgcatatt tgttggtcag caaaaccaag aaacaagagc
tatggcattt gaaaaagtct gtctgattcc agggtgtttt tcctgggttt catcatcagg
tacctcctcc ctttcatctc agcaagaatg tggcaccttt tatcgtttga taaagattaa
ggacatgttc tttggtcaac agccagaact taaaatctgc tggaataggg tcagagacca
tttcagctgc agctgaggaa aatgaaatgt tcattttatt tggtgccttg tctggggagc
acactaactc ttctggaaac gtgtcagtga.aacagagatc gttttgtgga atagcaaccc
atggttatgg cgagtgaccc gacgtgatct ggggggcagg ctgcagagga ctcatgacag
gctataccat gctgcggaat gggggcgcgg ggaacggagg tcagacctgc atgctgcgct
ggtccaaccg catccgcctc acgtggctca gcttcacgct ctttgtcatc ctggtcttct
tcccgctcat cgcccactat tacctcacca ctctggatga ggctgatgag gcaggcaagc
ggatttttgg tccccgggtg gggaacgagc tgtgcgaggt gaagcacgtg ctggatctgt
gccgcatccg ggagtcggtg agtgaagagc tcctgcagct ggaggccaag cgccaagagc
tgaacagcga gatcgccaag ctgaatctga agatcgaagc ctgtaagaag agcattgaga
acgccaagca ggacctgctc cagctcaaga atgtcatcag ccagaccgag cattcctaca
aggagctcat ggcccagaac cagcccaagc tgtccctgcc catccgactg ctcccagaga
aggacgatgc cggcctccct cccccgaagg ccactcgggg ctgccggcta cacaactgct
ttgattattc tcgttgccct ctcacctctg gcttcccggt ctacgtctat gacagtgacc
agtttgtctt tggcagctac ctggatccct tggtcaagca ggcttttcag gcgacagcac
gagctaacgt ttatgttaca gaaaatgcag acatcgcctg cctttacgtg atactagtgg
gagagatgca ggagcccgtg gtgctgcggc ctgctgagct ggagaagcag ttgtattccc
tgccacactg gcggacggat ggacacaacc atgtcatcat caatctgtca cgtaagtcag
atacacagaa ccttctctat aacgtcagta ctggccgtgc catggtggcc cagtccacct
tctacactgt ccagtacaga cctggctttg acttggtcgt atcaccgctg gtccatgcca
tgtctgagcc caacttcatg gaaatcccac cacaggtgcc ggtgaagcgg aaatatctct
tcaccttcca gggcgagaag attgagtctc tgaggtctag ccttcaggag gcccgctcct
tcgaagagga aatggagggc gaccctcccg ccgactacga tgaccggatc attgccaccc
tgaaggcggt gcaggacagc aagctggatc aggtcctggt ggaattcacc tgcaaaaacc

APPROVED BY DRAFTSMAN	O.G. FIG.	
	CLASS	SUBCLASS

FIG. 8A-2

```
agcccaaacc cagcctgccg actgagtggg cactgtgtgg agagcgggag gaccgcttgg
aattgctgaa gctctccacc ttcgccctca tcattacccc cggggaccct cgcttggtta
tttcctctgg gtgtgcaaca cggctcttcg aagccctgga agtcggtgcc gtcccggtgg
tgctggggga gcaggtccag cttccctacc aggacatgct gcagtggaac gaggcggccc
tggtggtgcc aaagcctcgt gttaccgagg ttcatttcct gctcagaagc ctctccgata
gtgacctcct ggctatgagg cggcaaggcc gctttctctg ggagacttac ttctccactg
ctgacagtat ttttaatacc gtgctggcta tgattaggac tcgcatccag atcccagccg
ctcccatccg ggaagaggcg gcagctgaga tcccccaccg ttcaggcaag gcggctggaa
ctgaccccaa catggctgac aacggggacc tggacctggg gccagtggag acggagccgc
cctacgcctc acccagatac ctccgcaatt tcactctgac tgtcactgac ttttaccgca
gctggaactg tgctccaggg cctttccatc ttttccccca cactcccttt gaccctgtgt
tgccctcaga ggccaaattc ttgggctcag ggactggctt tcggcctatt ggtggtggag
ctgggggttc tggcaaggaa tttcaggcag cgcttggagg caatgttccc cgagagcagt
tcacggtggt gatgttgact tatgagcggg aggaagtgct tatgaactct ttagagaggc
tgaatggcct cccttacctg aacaaggtcg tggtggtgtg gaattctccc aagctgccat
cagaggacct tctgtggcct gacattggcg ttcccatcat ggtggtccgt actgagaaga
acagtttgaa caaccgattc ttaccctgga atgaaattga gacagaggcc atcctgtcca
ttgatgacga tgctcacctc cgccatgacg aaatcatgtt tgggttccgg gtgtggagag
aagctcggga ccgcatcgtg ggcttccctg gccgttacca cgcatgggac atcccccatc
agtcctggct ctacaactcc aactactcct gtgagctgtc catggtgctg acaggtgctg
ccttctttca caagtattat gcctacctgt attcttatgt gatgccccag gccatccggg
acatggtgga tgaatacatc aactgtgagg acattgccat gaacttcctt gtctcccaca
tcactcggaa gcccccccatc aaggtgacct cacggtggac attccgatgc ccaggatgcc
ctcaggccct gtctcatgat gactcccact tccacgagcg gcacaagtgc atcaacttct
tcgtgaaggt gtacggctac atgcccctcc tgtacacgca gttcagggtg gattctgtgc
tcttcaagac acgcctgccc catgacaaga ccaagtgctt caagttcatc taggggcagc
gcacggtctg ggaagagga tgagcagagg gaggaagatg gctcccaagg ttcctaggca
ttgcaggacc ttgggcacat ctgctggtgg gtggcccaga gcctctgctg gaaggggcag
caggaggagt ggaaggaaac cgctgccttt atcttgaagt cagccacact gggcctggag
ccctgggcgg agtccccggg gttccccaca cagggcactg actgatagct tacactgagg
actgtggcga ctctgcagag tcactcacac cgttcgtacg cccaggacag ctggttcgtg
gtttttacat tcaataacaa ctattatgat tatttaaaaa gagaaagttt cagatttgcc
attcaaggct tatttatata tatgtgtgtg tatataaata catgcacaca cttgcataca
```

FIG. 8A-3

tatatatttt tggctggggg agtgtgagtt ttgcctttct aagggaggga ccgcgcaggc
tcctttgttc tgtattctgg cggagatggg tcctggcctt gtgtcactgg cttatcctta
aagatcatct cccatcctcc ccagcgccat ctgtgtgcag caaccagaaa gggatgaact
tggccctctt gcgggcctgg acaaggtctc ttccttaccc tttctgttgc cagtcagcaa
cctgtaactc acattctctt cccagtgaat ccctgggagc gcctgaccct ggtgggctgt
tcagcttcct gctgctgggg ccagcgattt ttgaggattt atctttaggc caggcttgcc
tccgtactta tccctgctct cccatttctc tcttgtttga gagagaatga ggaagcaaag
agtgagaaag aataggggct gaagacgcca ctcccagatg gctctttcta tcctgctctt
ctgttgaaac acacgtgctg tgggcctcag gcgtttctga agtgctcttt cttggattgg
acaggagatc agcagcgtgc acatctgctg tggtctgaag tggtttgcag gtcagcctcc
tctccctagt gtagagcaag ccagtgtcct tcgaggaacc cacccggctg gccgggaagt
tttacagcaa ggcgcctgcc ttgggataat tccttggtga aattcacctt ccccccgcct
ctgtctggag ccccatcctg tgttatctgt ggtttttgga cccctaatgt cagcttggct
gtaggactcc ccgaggtttg gtatgtgcta gaacaatggg aggctgtgat ttgctgtgta
agctcacatc cagccttgga atctaacggg cattcacaac ccgagttacc actttccact
ccctgcttag gattctgttc cctgggctga aactgaaata agctaatttt ttgggtcacg
gtggcagtag gggaacctag gagggtgtga gtggcatttg tcagggattt agcccatgac
gtgtttcttg aaccctactt tctggaagtg gagttgactc tggaagtttt ctagcaactg
aacaaaagct caggtttgtc ctggtcatgc acatgcctta agccagttcc gtcttcccta
gaccttggca tcctgtgctt ctatttcttg gaatacgttc tcctctgacc tgcctgtacc
acgtgggtcc tcttcaagta ctgttttgaa gctgggctct tttgtgtagc tcccacccac
ctgtagggct agctcggctt aagggaactc tccccattgg caaaccggac ccggccgccg
ccaggactgt gtttccaaag gttccccgcc cccaacccca gcatcagcct gtagctcccc
tgctgaggca gtgtggttat gttcccagca gtgggggtca gacgcccttc ctcagaactt
tctagttgcc ctctacctga ctcctgactt gtattccttt tagcagtagc cttcttccct
cggggagcca aagagtgtgg tgtgtggcgc tatattgtgg ctgctatttc atctggtttc
ttttaatgtg aggaactcac atactgactt cagtgggact cggtgagccg gggccgtctg
tgtggtggga ccccctttag cgggactcag tgagctgggg ccgtctgtgt ggtggagcca
gggcctctcc ctttagtgga gccaggttgt cgggccccga atgtcactgg tggatctaag
aagggctgag tggtctgaca ccaaaacatg ccgcagggag ggctgtggtg ccggtgcttc
caacaaggac agccctcctt gaccctgaaa ggaacactgg cttgaaggac tgcagacagg
ctctgagggg cacgccctcc tcagcgagag gcagcaaggt ggccacagtg tcactggtca
ggtgcttctc accacgggaa agccgccgac ctgtgactcg cttgagatgg gaaagcggcg
ccacagaccc cgggtctcct tggctgtctg tgggccgccc ctggccacct tgtcctggct
cgcagggtgc aggagcgcct cgttctctgg gtggccggct tgctgctccg gtttgggctg
tcttaccata acaccgtccc agggctctgc aggccactgt gagcgctggc tccctgggca
gtgctcctcc gtgtggactg tgcctcaggc cagggctcac cagctggggt cctgtccgga
aggatgggat ctttctggga gctgcgccgg acagagtggg gagctcctag tttgtggggg
gaagctttga tatccatgcc acgtccatcc accccacccc ttttcgtcac gagcacaatg
gtcttacatt ggatttttgt aaaaaaataa aaataaatgg agactttaac tc

APPROVED BY DRAFTSMAN	O.G. FIG.	
	CLASS	SUBCLASS

FIG. 8B-1

```
        10         20         30         40         50         60
ggcgggtccctgagctggaagccggagagcaagccctggaggttcactctttcaagaagt

        70         80         90        100        110        120
cgtgtgctgaggtgtaatgctacacaagtcagaggaaggaagggtcctgaaacacatggc

       130        140        150        160        170        180
ctgattgttggcaaaggcatcataagaagctggcatttatttctgttctaacctattact

       190        200        210        220        230        240
gtataactgtgaatagacactatgcatatttgttggtcagcaaaaccaagaaacaagagc

       250        260        270        280        290        300
tatggcatttgaaaaagtctgtctgattccagggtgtttttcctgggtttcatcatcagg

       310        320        330        340        350        360
tacctcctccctttcatctcagcaagaatgtggcaccttttatcgtttgataaagattaa

       370        380        390        400        410        420
ggacatgttctttggtcaacagccagaacttaaaatctgctggaatagggtcagagacca

       430        440        450        460        470        480
tttcagctgcagctgaggaaaatgaaatgttcatttatttggtgccttgtctggggagc

       490        500        510        520        530        540
acactaactcttctggaaacgtgtcagtgaaacagagatcgttttgtggaatagcaaccc

       550        560        570        580        590        600
atggttatggcgagtgacccgacgtgatctgggggggcaggctgcagaggactcatgacag
                                                         M  T  G

       610        620        630        640        650        660
gctataccatgctgcggaatgggggcgcggggaacggaggtcagacctgcatgctgcgct
 Y  T  M  L  R  N  G  G  A  G  N  G  G  Q  T  C  M  L  R  W

       670        680        690        700        710        720
ggtccaaccgcatccgcctcacgtggctcagcttcacgctctttgtcatcctggtcttct
 S  N  R  I  R  L  T  W  L  S  F  T  L  F  V  I  L  V  F  F
```

FIG. 8B-2

```
          730       740       750       760       770       780
tcccgctcatcgcccactattacctcaccactctggatgaggctgatgaggcaggcaagc
  P  L  I  A  H  Y  Y  L  T  T  L  D  E  A  D  E  A  G  K  R

          790       800       810       820       830       840
ggattttggtccccgggtggggaacgagctgtgcgaggtgaagcacgtgctggatctgt
  I  F  G  P  R  V  G  N  E  L  C  E  V  K  H  V  L  D  L  C

          850       860       870       880       890       900
gccgcatccgggagtcggtgagtgaagagctcctgcagctggaggccaagcgccaagagc
  R  I  R  E  S  V  S  E  E  L  L  Q  L  E  A  K  R  Q  E  L

          910       920       930       940       950       960
tgaacagcgagatcgccaagctgaatctgaagatcgaagcctgtaagaagagcattgaga
  N  S  E  I  A  K  L  N  L  K  I  E  A  C  K  K  S  I  E  N

          970       980       990      1000      1010      1020
acgccaagcaggacctgctccagctcaagaatgtcatcagccagaccgagcattcctaca
  A  K  Q  D  L  L  Q  L  K  N  V  I  S  Q  T  E  H  S  Y  K

         1030      1040      1050      1060      1070      1080
aggagctcatggcccagaaccagcccaagctgtccctgcccatccgactgctcccagaga
  E  L  M  A  Q  N  Q  P  K  L  S  L  P  I  R  L  L  P  E  K

         1090      1100      1110      1120      1130      1140
aggacgatgccggcctccctcccccgaaggccactcggggctgccggctacacaactgct
  D  D  A  G  L  P  P  P  K  A  T  R  G  C  R  L  H  N  C  F

         1150      1160      1170      1180      1190      1200
ttgattattctcgttgccctctcacctctggcttcccggtctacgtctatgacagtgacc
  D  Y  S  R  C  P  L  T  S  G  F  P  V  Y  V  Y  D  S  D  Q

         1210      1220      1230      1240      1250      1260
agtttgtctttggcagctacctggatcccttggtcaagcaggctttcaggcgacagcac
  F  V  F  G  S  Y  L  D  P  L  V  K  Q  A  F  Q  A  T  A  R

         1270      1280      1290      1300      1310      1320
gagctaacgtttatgttacagaaaatgcagacatcgcctgcctttacgtgatactagtgg
  A  N  V  Y  V  T  E  N  A  D  I  A  C  L  Y  V  I  L  V  G

         1330      1340      1350      1360      1370      1380
gagagatgcaggagcccgtggtgctgcggcctgctgagctggagaagcagttgtattccc
  E  M  Q  E  P  V  V  L  R  P  A  E  L  E  K  Q  L  Y  S  L

         1390      1400      1410      1420      1430      1440
tgccacactggcggacggatggacacaaccatgtcatcatcaatctgtcacgtaagtcag
  P  H  W  R  T  D  G  H  N  H  V  I  I  N  L  S  R  K  S  D

         1450      1460      1470      1480      1490      1500
atacacagaaccttctctataacgtcagtactggccgtgccatggtggcccagtccacct
  T  Q  N  L  L  Y  N  V  S  T  G  R  A  M  V  A  Q  S  T  F
```

FIG. 8B-3

```
      1510       1520       1530       1540       1550       1560
tctacactgtccagtacagacctggctttgacttggtcgtatcaccgctggtccatgcca
  Y  T  V  Q  Y  R  P  G  F  D  L  V  V  S  P  L  V  H  A  M

      1570       1580       1590       1600       1610       1620
tgtctgagcccaacttcatggaaatcccaccacaggtgccggtgaagcggaaatatctct
  S  E  P  N  F  M  E  I  P  P  Q  V  P  V  K  R  K  Y  L  F

      1630       1640       1650       1660       1670       1680
tcaccttccagggcgagaagattgagtctctgaggtctagccttcaggaggcccgctcct
  T  F  Q  G  E  K  I  E  S  L  R  S  S  L  Q  E  A  R  S  F

      1690       1700       1710       1720       1730       1740
tcgaagaggaaatggagggcgaccctcccgccgactacgatgaccggatcattgccaccc
  E  E  E  M  E  G  D  P  P  A  D  Y  D  D  R  I  I  A  T  L

      1750       1760       1770       1780       1790       1800
tgaaggcggtgcaggacagcaagctggatcaggtcctggtggaattcacctgcaaaaacc
  K  A  V  Q  D  S  K  L  D  Q  V  L  V  E  F  T  C  K  N  Q

      1810       1820       1830       1840       1850       1860
agcccaaacccagcctgccgactgagtgggcactgtgtggagagcgggaggaccgcttgg
  P  K  P  S  L  P  T  E  W  A  L  C  G  E  R  E  D  R  L  E

      1870       1880       1890       1900       1910       1920
aattgctgaagctctccaccttcgccctcatcattacccccggggaccctcgcttggtta
  L  L  K  L  S  T  F  A  L  I  I  T  P  G  D  P  R  L  V  I

      1930       1940       1950       1960       1970       1980
tttcctctgggtgtgcaacacggctcttcgaagccctggaagtcggtgccgtcccggtgg
  S  S  G  C  A  T  R  L  F  E  A  L  E  V  G  A  V  P  V  V

      1990       2000       2010       2020       2030       2040
tgctgggggagcaggtccagcttccctaccaggacatgctgcagtggaacgaggcggccc
  L  G  E  Q  V  Q  L  P  Y  Q  D  M  L  Q  W  N  E  A  A  L

      2050       2060       2070       2080       2090       2100
tggtggtgccaaagcctcgtgttaccgaggttcatttcctgctcagaagcctctccgata
  V  V  P  K  P  R  V  T  E  V  H  F  L  L  R  S  L  S  D  S

      2110       2120       2130       2140       2150       2160
gtgacctcctggctatgaggcggcaaggccgctttctctgggagacttacttctccactg
  D  L  L  A  M  R  R  Q  G  R  F  L  W  E  T  Y  F  S  T  A

      2170       2180       2190       2200       2210       2220
ctgacagtatttttaataccgtgctggctatgattaggactcgcatccagatcccagccg
  D  S  I  F  N  T  V  L  A  M  I  R  T  R  I  Q  I  P  A  A

      2230       2240       2250       2260       2270       2280
ctcccatccgggaagaggcggcagctgagatcccccaccgttcaggcaaggcggctggaa
  P  I  R  E  E  A  A  A  E  I  P  H  R  S  G  K  A  A  G  T
```

FIG. 8B-4

```
      2290       2300       2310       2320       2330       2340
ctgaccccaacatggctgacaacggggacctggacctggggccagtggagacggagccgc
  D  P  N  M  A  D  N  G  D  L  D  L  G  P  V  E  T  E  P  P

      2350       2360       2370       2380       2390       2400
cctacgcctcacccagatacctccgcaatttcactctgactgtcactgacttttaccgca
  Y  A  S  P  R  Y  L  R  N  F  T  L  T  V  T  D  F  Y  R  S

      2410       2420       2430       2440       2450       2460
gctggaactgtgctccagggcctttccatcttttcccccacactccctttgaccctgtgt
  W  N  C  A  P  G  P  F  H  L  F  P  H  T  P  F  D  P  V  L

      2470       2480       2490       2500       2510       2520
tgccctcagaggccaaattcttgggctcagggactggctttcggcctattggtggtggag
  P  S  E  A  K  F  L  G  S  G  T  G  F  R  P  I  G  G  G  A

      2530       2540       2550       2560       2570       2580
ctgggggttctggcaaggaatttcaggcagcgcttggaggcaatgttccccgagagcagt
  G  G  S  G  K  E  F  Q  A  A  L  G  G  N  V  P  R  E  Q  F

      2590       2600       2610       2620       2630       2640
tcacggtggtgatgttgacttatgagcgggaggaagtgcttatgaactctttagagaggc
  T  V  V  M  L  T  Y  E  R  E  E  V  L  M  N  S  L  E  R  L

      2650       2660       2670       2680       2690       2700
tgaatggcctcccttacctgaacaaggtcgtggtggtgtggaattctcccaagctgccat
  N  G  L  P  Y  L  N  K  V  V  V  V  W  N  S  P  K  L  P  S

      2710       2720       2730       2740       2750       2760
cagaggaccttctgtggcctgacattggcgttcccatcatggtggtccgtactgagaaga
  E  D  L  L  W  P  D  I  G  V  P  I  M  V  V  R  T  E  K  N

      2770       2780       2790       2800       2810       2820
acagtttgaacaaccgattcttaccctggaatgaaattgagacagaggccatcctgtcca
  S  L  N  N  R  F  L  P  W  N  E  I  E  T  E  A  I  L  S  I

      2830       2840       2850       2860       2870       2880
ttgatgacgatgctcacctccgccatgacgaaatcatgtttgggttccgggtgtggagag
  D  D  D  A  H  L  R  H  D  E  I  M  F  G  F  R  V  W  R  E

      2890       2900       2910       2920       2930       2940
aagctcgggaccgcatcgtgggcttccctggccgttaccacgcatgggacatcccccatc
  A  R  D  R  I  V  G  F  P  G  R  Y  H  A  W  D  I  P  H  Q

      2950       2960       2970       2980       2990       3000
agtcctggctctacaactccaactactcctgtgagctgtccatggtgctgacaggtgctg
  S  W  L  Y  N  S  N  Y  S  C  E  L  S  M  V  L  T  G  A  A

      3010       3020       3030       3040       3050       3060
ccttctttcacaagtattatgcctacctgtattcttatgtgatgccccaggccatccggg
  F  F  H  K  Y  Y  A  Y  L  Y  S  Y  V  M  P  Q  A  I  R  D
```

FIG. 8B-5

```
      3070      3080      3090      3100      3110      3120
acatggtggatgaatacatcaactgtgaggacattgccatgaacttccttgtctcccaca
 M  V  D  E  Y  I  N  C  E  D  I  A  M  N  F  L  V  S  H  I

      3130      3140      3150      3160      3170      3180
tcactcggaagcccccatcaaggtgacctcacggtggacattccgatgcccaggatgcc
 T  R  K  P  P  I  K  V  T  S  R  W  T  F  R  C  P  G  C  P

      3190      3200      3210      3220      3230      3240
ctcaggccctgtctcatgatgactcccacttccacgagcggcacaagtgcatcaacttct
 Q  A  L  S  H  D  D  S  H  F  H  E  R  H  K  C  I  N  F  F

      3250      3260      3270      3280      3290      3300
tcgtgaaggtgtacggctacatgcccctcctgtacacgcagttcagggtggattctgtgc
 V  K  V  Y  G  Y  M  P  L  L  Y  T  Q  F  R  V  D  S  V  L

      3310      3320      3330      3340      3350      3360
tcttcaagacacgcctgccccatgacaagaccaagtgcttcaagttcatctaggggcagc
 F  K  T  R  L  P  H  D  K  T  K  C  F  K  F  I  *

      3370      3380      3390      3400      3410      3420
gcacggtctggggaagaggatgagcagagggaggaagatggctcccaaggttcctaggca

      3430      3440      3450      3460      3470      3480
ttgcaggaccttgggcacatctgctggtgggtggcccagagcctctgctggaaggggcag

      3490      3500      3510      3520      3530      3540
caggaggagtggaaggaaaccgctgcctttatcttgaagtcagccacactgggcctggag

      3550      3560      3570      3580      3590      3600
ccctgggcggagtccccggggttccccacacagggcactgactgatagcttacactgagg

      3610      3620      3630      3640      3650      3660
actgtggcgactctgcagagtcactcacaccgttcgtacgcccaggacagctggttcgtg

      3670      3680      3690      3700      3710      3720
gttttacattcaataacaactattatgattatttaaaagagaaagtttcagatttgcc

      3730      3740      3750      3760      3770      3780
attcaaggcttatttatatatatgtgtgtatataaatacatgcacacacttgcataca

      3790      3800      3810      3820      3830      3840
tatatattttggctgggggagtgtgagttttgcctttctaagggagggaccgcgcaggc
```

FIG. 8B-6

```
      3850       3860       3870       3880       3890       3900
tcctttgttctgtattctggcggagatgggtcctggccttgtgtcactggcttatcctta

      3910       3920       3930       3940       3950       3960
aagatcatctcccatcctccccagcgccatctgtgtgcagcaaccagaaagggatgaact

      3970       3980       3990       4000       4010       4020
tggccctcttgcgggcctggacaaggtctcttccttacccttctgttgccagtcagcaa

      4030       4040       4050       4060       4070       4080
cctgtaactcacattctcttcccagtgaatccctgggagcgcctgaccctggtgggctgt

      4090       4100       4110       4120       4130       4140
tcagcttcctgctgctggggccagcgatttttgaggatttatctttaggccaggcttgcc

      4150       4160       4170       4180       4190       4200
tccgtacttatccctgctctcccatttctctcttgtttgagagagaatgaggaagcaaag

      4210       4220       4230       4240       4250       4260
agtgagaaagaataggggctgaagacgccactcccagatggctctttctatcctgctctt

      4270       4280       4290       4300       4310       4320
ctgttgaaacacacgtgctgtgggcctcaggcgtttctgaagtgctctttcttggattgg

      4330       4340       4350       4360       4370       4380
acaggagatcagcagcgtgcacatctgctgtggtctgaagtggtttgcaggtcagcctcc

      4390       4400       4410       4420       4430       4440
tctccctagtgtagagcaagccagtgtccttcgaggaacccacccggctggccgggaagt

      4450       4460       4470       4480       4490       4500
tttacagcaaggcgcctgccttgggataattccttggtgaaattcaccttcccccgcct

      4510       4520       4530       4540       4550       4560
ctgtctggagccccatcctgtgttatctgtggtttttggacccctaatgtcagcttggct

      4570       4580       4590       4600       4610       4620
gtaggactccccgaggtttggtatgtgctagaacaatgggaggctgtgatttgctgtgta
```

FIG. 8B-7

```
       4630      4640      4650      4660      4670      4680
agctcacatccagccttggaatctaacgggcattcacaacccgagttaccactttccact

       4690      4700      4710      4720      4730      4740
ccctgcttaggattctgttccctgggctgaaactgaaataagctaatttttgggtcacg

       4750      4760      4770      4780      4790      4800
gtggcagtaggggaacctaggagggtgtgagtggcatttgtcagggatttagcccatgac

       4810      4820      4830      4840      4850      4860
gtgtttcttgaaccctactttctggaagtggagttgactctggaagttttctagcaactg

       4870      4880      4890      4900      4910      4920
aacaaaagctcaggtttgtcctggtcatgcacatgccttaagccagttccgtcttcccta

       4930      4940      4950      4960      4970      4980
gaccttggcatcctgtgcttctatttcttggaatacgttctcctctgacctgcctgtacc

       4990      5000      5010      5020      5030      5040
acgtgggtcctcttcaagtactgttttgaagctgggctcttttgtgtagctcccacccac

       5050      5060      5070      5080      5090      5100
ctgtagggctagctcggcttaagggaactctccccattggcaaaccggacccggccgccg

       5110      5120      5130      5140      5150      5160
ccaggactgtgtttccaaaggttccccgcccccaaccccagcatcagcctgtagctcccc

       5170      5180      5190      5200      5210      5220
tgctgaggcagtgtggttatgttcccagcagtgggggtcagacgcccttcctcagaactt

       5230      5240      5250      5260      5270      5280
tctagttgccctctacctgactcctgacttgtattccttttagcagtagccttcttccct

       5290      5300      5310      5320      5330      5340
cggggagccaaagagtgtggtgtgtggcgctatattgtggctgctatttcatctggtttc

       5350      5360      5370      5380      5390      5400
ttttaatgtgaggaactcacatactgacttcagtgggactcggtgagccggggccgtctg
```

FIG. 8B-8

```
        5410      5420      5430      5440      5450      5460
tgtggtgggaccccctttagcgggactcagtgagctggggccgtctgtgtggtggagcca

        5470      5480      5490      5500      5510      5520
gggcctctccctttagtggagccaggttgtcgggccccgaatgtcactggtggatctaag

        5530      5540      5550      5560      5570      5580
aagggctgagtggtctgacaccaaaacatgccgcagggagggctgtggtgccggtgcttc

        5590      5600      5610      5620      5630      5640
caacaaggacagccctccttgaccctgaaaggaacactggcttgaaggactgcagacagg

        5650      5660      5670      5680      5690      5700
ctctgaggggcacgccctcctcagcgagaggcagcaaggtggccacagtgtcactggtca

        5710      5720      5730      5740      5750      5760
ggtgcttctcaccacgggaaagccgccgacctgtgactcgcttgagatgggaaagcggcg

        5770      5780      5790      5800      5810      5820
ccacagaccccgggtctccttggctgtctgtgggccgcccctggccaccttgtcctggct

        5830      5840      5850      5860      5870      5880
cgcagggtgcaggagcgcctcgttctctgggtggccggcttgctgctccggtttgggctg

        5890      5900      5910      5920      5930      5940
tcttaccataacaccgtcccagggctctgcaggccactgtgagcgctggctccctgggca

        5950      5960      5970      5980      5990      6000
gtgctcctccgtgtggactgtgcctcaggccagggctcaccagctggggtcctgtccgga

        6010      6020      6030      6040      6050      6060
aggatgggatctttctgggagctgcgccggacagagtggggagctcctagtttgtggggg

        6070      6080      6090      6100      6110      6120
gaagctttgatatccatgccacgtccatccaccccaccccttttcgtcacgagcacaatg

        6130      6140      6150      6160      6170
gtcttacattggattttgtaaaaaaataaaaataaatggagactttaactc
```

FIG. 9A

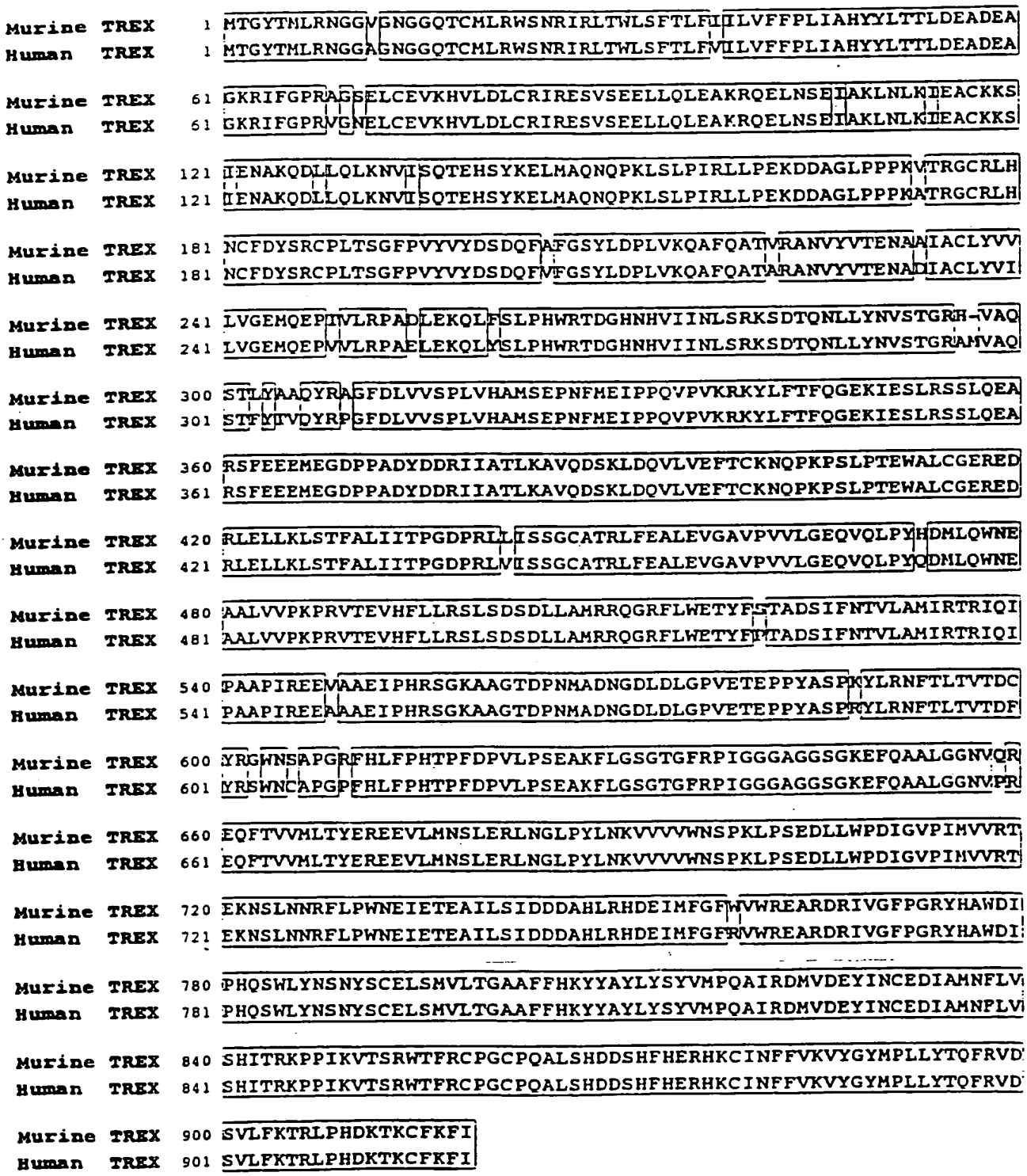


FIG. 9B

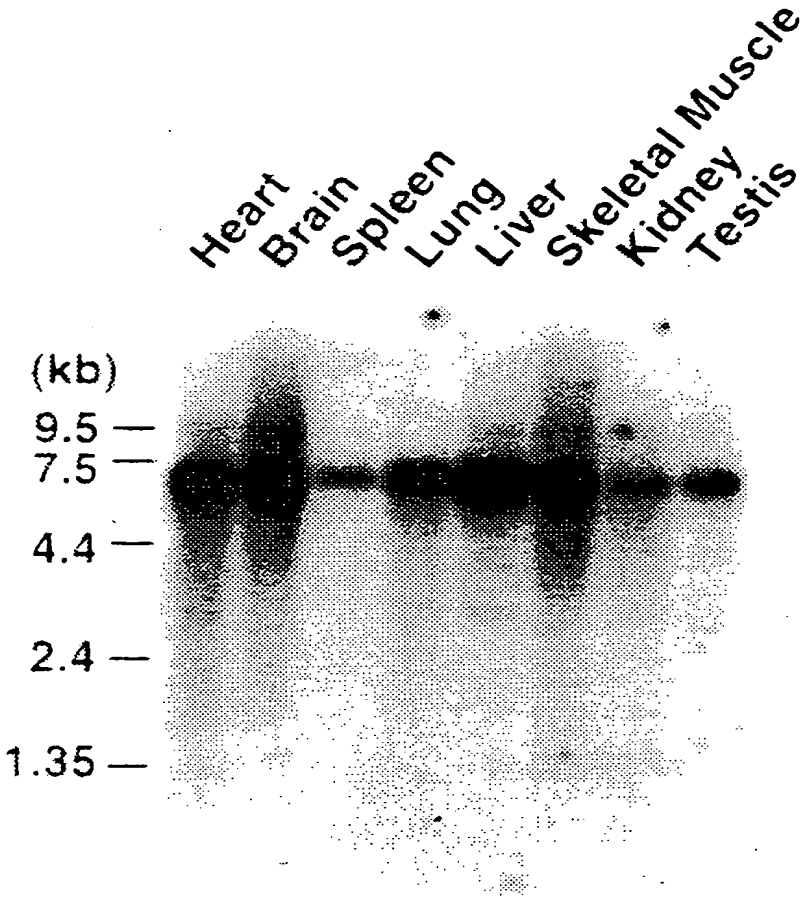


FIG. 10A

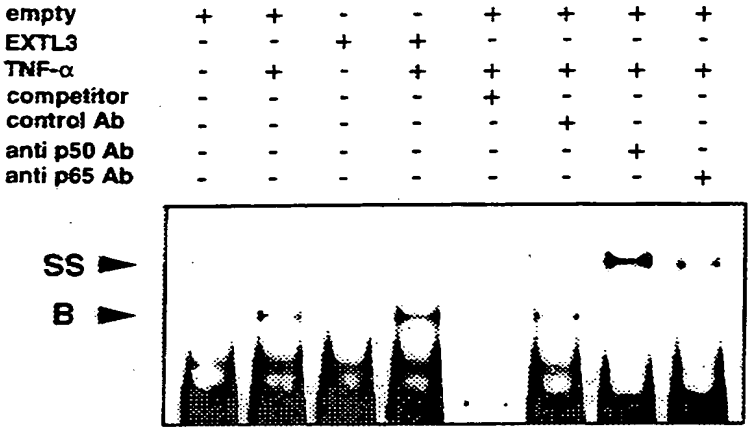


FIG. 10B

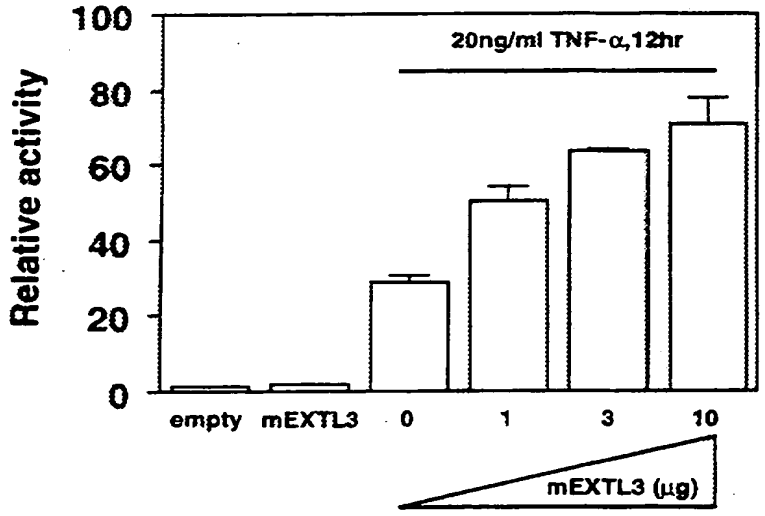


FIG. 10C

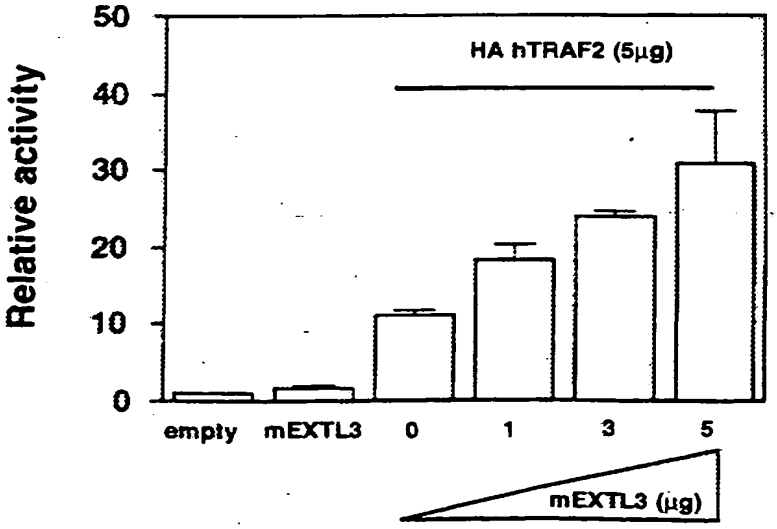


FIG. 11A

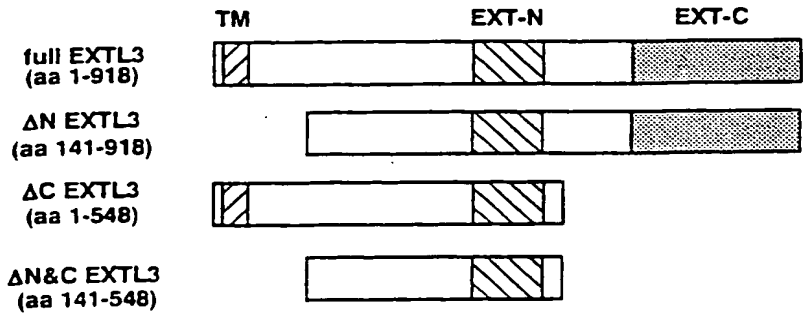


FIG. 11B

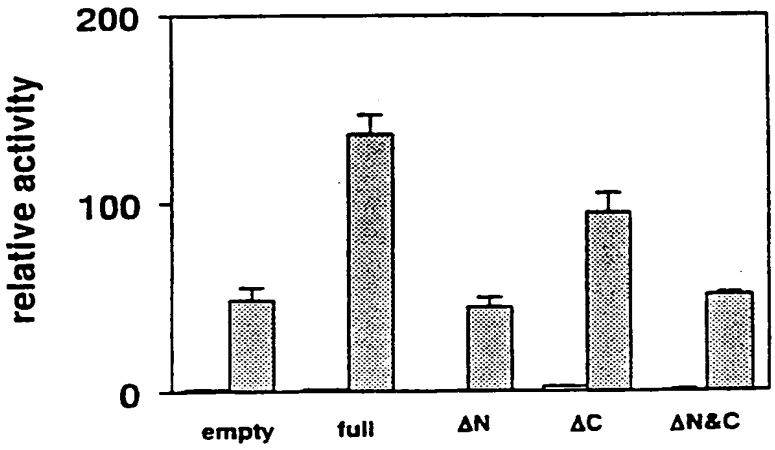


FIG. 11C

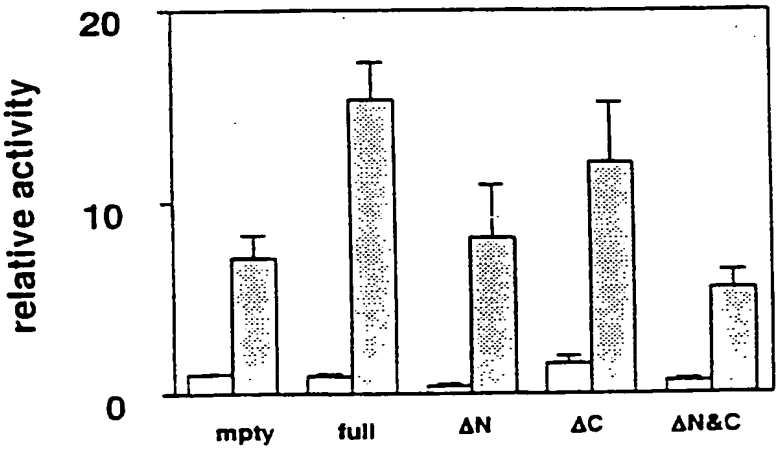


FIG. 11D-a

FIG. 11D-b

FIG. 11D-c

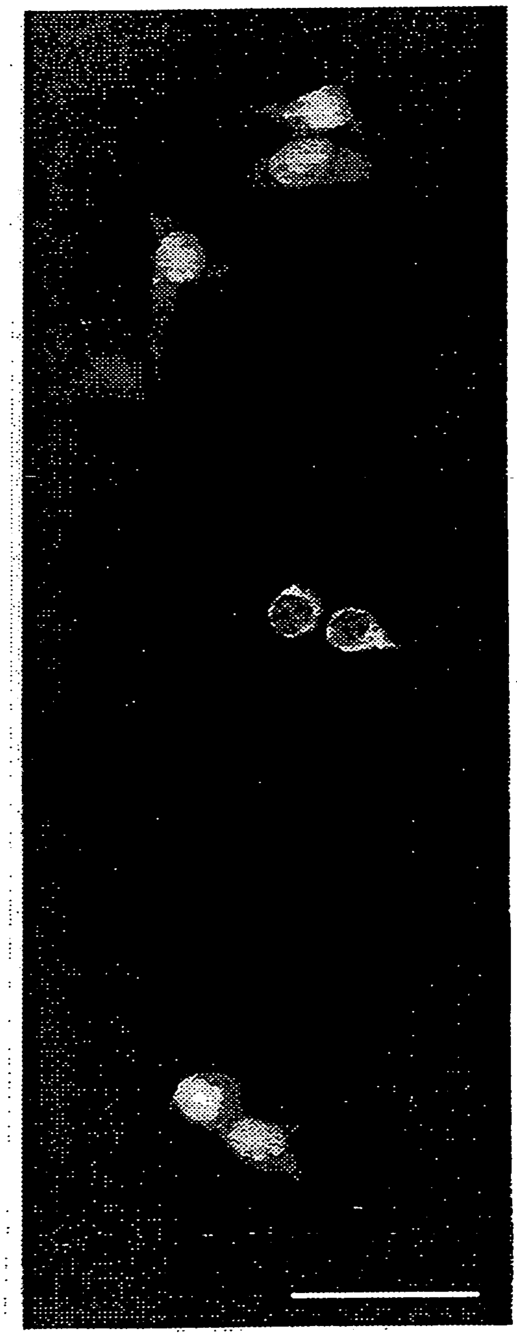


FIG. 12A

FIG. 12B

FIG. 12C

FIG. 12D

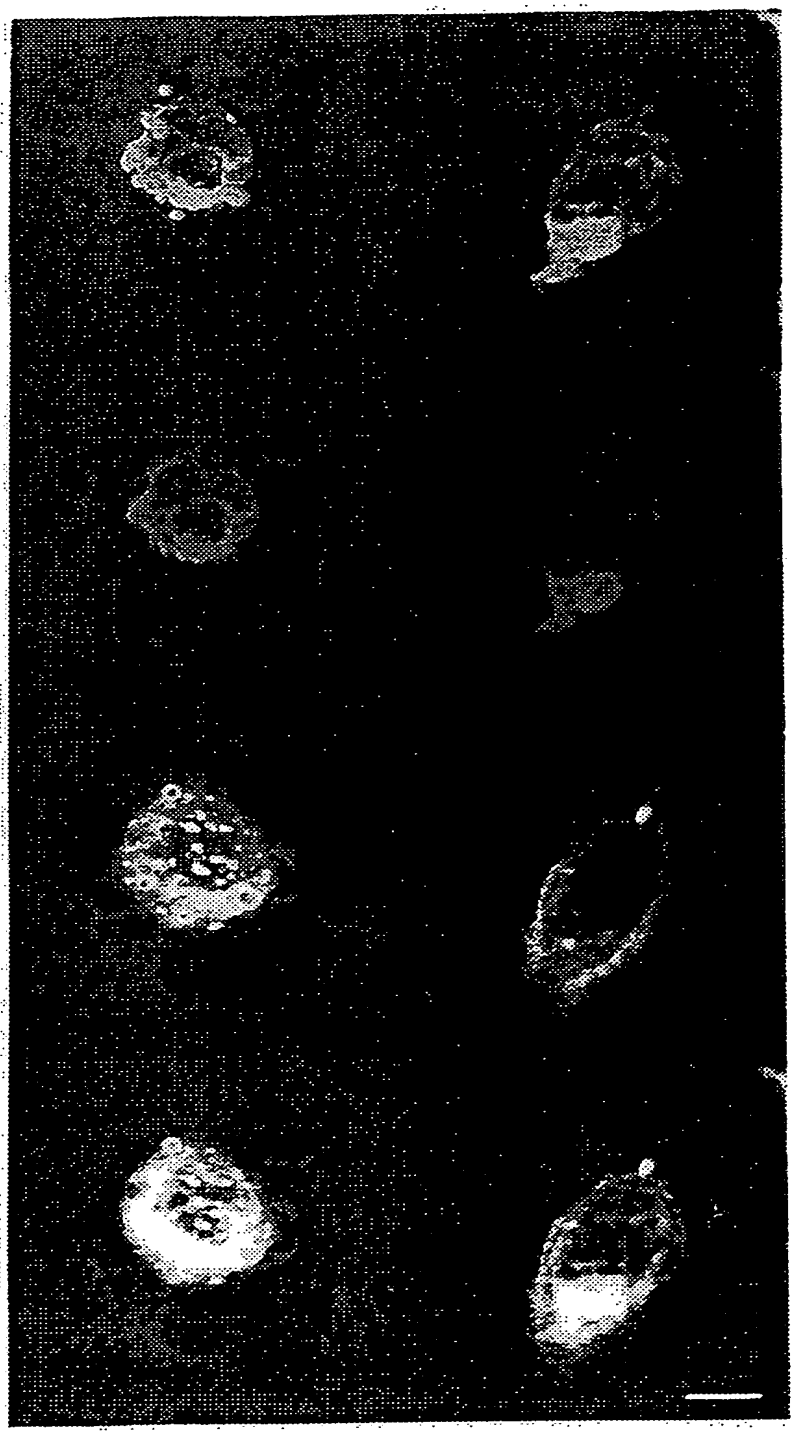


FIG. 12E

FIG. 12F

FIG. 12G

FIG. 12H